REMARKS

Claims remaining in the present application are Claims 1-12. Claim 1 has been amended. No Claims have been canceled. No new matter has been added as a result of these amendments.

CLAIM REJECTIONS

35 U.S.C. §102

In paragraph 3, Claims 1-3 and 7-9 are rejected under 35 U.S.C. §102(b) as being anticipated by USPN 6,028,324 by Su et al. (referred to hereinafter as "Su"). Claim 1 has been amended to more distinctly claim an embodiment of the present invention to which Applicants are entitled. It is respectfully submitted that Claims 1-3 and 7-9 are neither taught nor suggested by Su.

Amended independent Claim 1 recites:

> a first isolation oxide and a second isolation oxide disposed over the N doped substrate, wherein the first isolation oxide and the second isolation oxide are separated by the gate oxide layer;
>
> an N+ doped gate disposed over at least one portion of the first isolation oxide, the gate oxide, and the second isolation oxide. a first isolation oxide and a second isolation oxide disposed over the N doped substrate.

The cited reference fails to teach or suggest the claimed limitations as discussed below.

The Office Actions states,

> Figure 2 illustrates a semiconductor device having a doped polysilicon gate (26) disposed over a first and second isolation oxide (22) and a gate oxide 24. This structure is over a n-type substrate (20).

For the sake of argument, it shall be assumed that the Office Action intends to argue that the N+ doped gate recited by Claim 1 is analogous to Su's polysilicon capacitor plates 26, the first and second isolation oxides recited by Claim 1 are analogous to Su's field oxide 22, and the gate oxide recited by Claim 1 is analogous to Su's gate oxide 24.

However, Su discloses a single field oxide 22 in FIG. 2 and at Col. 4 line 15 rather than a first and second isolation oxide as recited in Claim 1. Further, referring to Su's FIG. 2, Su's polysilicon capacitor 26 is not over at least one portion of a first portion of Su's field oxide 22, Su's gate oxide 24, and Su's second field oxide 22. In fact, as already explained, Su doesn't even have a first and second field oxide 22.

For at least the reasons given in the foregoing rationale, the limitations of Claim 1 are neither taught nor suggested by Su. As such, allowance of Claim 1 is respectfully solicited.

Claims 2 and 3 depend on Claim 1, which is believed to be allowable for the foregoing rationale. As such, it is respectfully asserted that the rejections of Claims 2 and 3 have been overcome and their allowance is earnestly solicited.

The cited reference fails to teach or suggest the claimed limitations of Claim 7 for similar reasons that the cited reference fails to teach or suggest the claimed limitations of Claim 1. As such, allowance of Claim 7 is respectfully solicited.

Claims 8 and 9 depend on Claim 7, which is believed to be allowable for the foregoing rationale. As such, it is respectfully asserted that the rejections of Claims 8 and 9 have been overcome and their allowance is earnestly solicited.

CLAIM REJECTIONS

35 U.S.C. §102

In paragraph 5, Claims 4-6 and 10-12 are rejected under 35 U.S.C. §102(b) as being anticipated by Su. The rejection is respectfully traversed. It is respectfully submitted that Claims 4-6 and 10-12 are neither taught nor suggested by Su.

Independent Claim 4 recites:

a first isolation oxide and a second isolation oxide disposed over the P doped substrate;

a P+ doped gate disposed over at least one portion of the first isolation oxide, the gate oxide, and the second isolation oxide.

The Office Actions states,

> Figure 2 illustrates a semiconductor device having a doped polysilicon gate (26) disposed over a first and second isolation oxide (22) and a gate oxide 24. This structure is over a p-type substrate (20).

For the sake of argument, it shall be assumed that the Office Action intends to argue that the P+ doped gate recited by Claim 4 is analogous to Su's polysilicon capacitor plates 26, the first and second isolation oxides recited by Claim 4 are analogous to Su's field oxide 22, and the gate oxide recited by Claim 4 is analogous to Su's gate oxide 24.

However, Su discloses a single field oxide 22 in FIG. 2 and at Col. 4 line 15 rather than a first and second isolation oxide as recited in Claim 4. Further, referring to Su's FIG. 2, Su's polysilicon capacitor 26 is not over at least one portion of a first portion of Su's field oxide 22, Su's gate oxide 24, and Su's second field oxide 22. In fact, as already explained, Su doesn't even have a first and second field oxide 22.

For at least the reasons given in the foregoing rationale, the limitations of Claim 4 are neither taught nor suggested by Su. As such, allowance of Claim 4 is respectfully solicited.

Claims 5 and 6 depend on Claim 4, which is believed to be allowable for the foregoing rationale. As such, it is respectfully asserted that the rejections of Claims 5 and 6 have been overcome and their allowance is earnestly solicited.

Independent Claim 10 recites:

a first isolation oxide and a second isolation oxide disposed over the substrate;

a P+ doped gate disposed over the first isolation oxide, the gate oxide, and the second isolation oxide, wherein the semiconductor capacitor structure is used to characterize polysilicon gate depletion corresponding to a semiconductor process.

The cited reference fails to teach or suggest the claimed limitations of Claim 10 for similar reasons that the cited reference fails to teach or suggest the claimed limitations of Claim 4. As such, allowance of Claim 10 is respectfully solicited.

Claims 11 and 12 depend on Claim 10, which is believed to be allowable for the foregoing rationale. As such, it is respectfully asserted that the rejections of Claims 11 and 12 have been overcome and their allowance is earnestly solicited.

CONCLUSION

In light of the above listed amendments and remarks, reconsideration of the rejected Claims is requested. Based on the amendments and arguments presented above, it is respectfully submitted that Claims 1-29 overcome the rejections of record. Therefore, allowance of Claims 1-29 is earnestly solicited.

Should the Examiner have a question regarding the instant response, the Applicant invites the Examiner to contact the Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,
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Dated: Sept 7, 2004

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